# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

EON CORP. IP HOLDINGS, LLC,	§	
Plaintiff,	§ §	Civil Action No. 6:09-CV-116-LED
V.	§	
SENSUS USA INC., et al.,	<b>§</b> <b>§</b>	JURY TRIAL DEMANDED
Defendants.	§ §	

SENSUS USA INC.'S SUPPLEMENTAL MARKMAN BRIEF ON CERTAIN TERMS RELATED TO THE PROSECUTION HISTORY OF THE PATENTS-IN-SUIT

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#### **INTRODUCTION**

Pursuant to the Court's June 11, 2010 Order [Dkt. No. 180], Defendant Sensus USA, Inc. ("Sensus") hereby submits supplemental briefing on the effect of the ex-parte reexamination of the patents-in-suit on the construction of certain claim terms.<sup>1</sup>

#### **LEGAL PRINCIPLES**

The intrinsic record plays a key role in interpreting claim terms. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317–18 (Fed. Cir. 2005). The prosecution history, which includes the complete record of the proceedings before the PTO, is considered part of the intrinsic record. *Id.* at 1317. Statements made during prosecution, which includes reexamination, may bind the patentee to a particular meaning for a patent term, both in prosecution and related litigation. *Beneficial Innovations, Inc. v. Blockdot, Inc.*, No. 2:07-CV-555, Dkt. No. 264, at 3 (E.D. Tex. June 3, 2010) (*citing CVI/Beta Ventures v. Tura LP*, 112 F.3d 1146, 1158 (Fed. Cir. 1987)).

## REEXAMINATION BACKGROUND

January 9, 2009: A third-party filed separate requests for reexamination of EON's '101 and '546 patents-in-suit<sup>2</sup> based on a number of publication prior art references, including the Morales-Garza patents.<sup>3</sup> the Martinez patents.<sup>4</sup> and the Cunningham patent.<sup>5</sup>

<u>February 25, 2009:</u> The PTO granted both requests for reexamination, finding a substantial new question of patentability based on the Cunningham patent, either considered alone or in combination with the Morales-Garza and Martinez references.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Both patents asserted in this case, U.S. Patent Nos. 5,388,101 ("'101 patent") (Ex. A) and 5,481,546 ("'546 patent") (Ex. B), were subject to reexamination proceedings before the U.S. Patent and Trademark Office ("PTO").

<sup>&</sup>lt;sup>2</sup> See Ex Parte Reexamination Requests for '101 and '546 patents [hereinafter "'101 Reexam Request" and "'546 Reexam Request"] (Exs. C & D).

<sup>&</sup>lt;sup>3</sup> U.S. Patent Nos. 4,591,906, 4,755,871, and 5,101,267 (Exs. E, F & G).

<sup>&</sup>lt;sup>4</sup> U.S. Patent Nos. 4,928,177, 4,750,036, and 4,513,415 (Exs. H, I & J).

<sup>&</sup>lt;sup>5</sup> U.S. Patent No. 4,144,496 (Ex. K).

<sup>&</sup>lt;sup>6</sup> See Orders Granting Request for Ex Parte Reexamination for '101 patent at 7–9 (Ex. L) and '546 patent at 7–9 (Ex. M).

August 7, 2009: The PTO issued its first, non-final Office Action in each of the reexaminations, rejecting all claims of the '101 and '546 patents. In doing so, the PTO adopted and incorporated by reference the invalidity arguments set forth in the reexamination requests based on Cunningham, alone or in combination with the Morales-Garza and/or Martinez patents.<sup>7</sup>

October 7, 2009: EON responded to the PTO's August 7, 2009 non-final office action. 

May 10–11, 2010: The PTO issued a Final Office Action for the '101 patent, confirming claims 1–18 as patentable and rejecting claims 19 and 20, and also issued a Notice of Intent to Issue a Reexamination Certificate for the '546 patent, confirming all of its claims as patentable. 

October 7, 2009: EON responded to the PTO's August 7, 2009 non-final office action. 

Issue a Reexamination Certificate for the '546 patent, confirming all of its claims as patentable.

#### **ARGUMENT**

# A. Interactive video network [system]; interactive video data system

EON's continued use of the term "interactive video network" and "interactive video data service (IVDS) system" to distinguish its invention from the prior art, including to overcome the PTO's rejections of EON's '101 and '546 patent claims during reexamination, and to avoid defendants' proposed constructions leads to only one conclusion: the terms "interactive video network [system]" and "interactive video data system" as used to describe "the invention" in the '101 and '546 patent specification and claims are limitations. <sup>10</sup>

<sup>&</sup>lt;sup>7</sup> See Non-Final Office Action for the '101 and '546 patents [hereinafter "'101 Office Action" and "'546 Office Action"] (Aug. 7, 2009) (Exs. N & O).

<sup>&</sup>lt;sup>8</sup> See Response to Office Action in Ex Parte Reexamination for the '101 and '546 patents [hereinafter "'101 Office Action Resp." and "'546 Office Action Resp."] (Oct, 7, 2009) (Exs. P & Q).

<sup>&</sup>lt;sup>9</sup> See Final Office Action for the '101 patent (May 10, 2010) (Ex. R); Notice of Intent to Issue Ex Parte Reexamination Certificate for the '546 patent (May 11, 2010) (Ex. S).

<sup>&</sup>lt;sup>10</sup> All '101 and '546 patent claims except for '101 patent claims 19 and 20 and '546 patent claim 14 recite either "interactive video network" or "interactive video network system." '101 patent claims 19 and 20 instead recite "interactive video data system." Regardless, it is clear from the collection of statements made by EON during reexamination and claim-construction, in conjunction with the '101 and '546 patent specifications, that the terms "interactive video network [system]" and "interactive video data system" are of critical importance and breathe life and meaning into the claims; they are therefore limiting. *See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) ("The effect preamble language should be given can be resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to claim"); *Symantec Corp. v. Computer Assocs. Int'l, Inc.*, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (*quoting Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)) ("Reliance on the preamble during (continued...)

To overcome obviousness rejections during reexamination, EON made arguments to the PTO that treat both the FCC IDVS specification and the "interactive video network" features of the prior art Morales-Garza patents as limitations to the EON system. First, EON argued that because its patents relate to FCC IVDS systems, prior art relating to interactive video networks, such as those disclosed by the Morales-Garza and Martinez patents, cannot render the EON invention obvious. Then, EON argued to the PTO that there would be no motivation to combine the very interactive video network systems that expressly form the basis for the EON invention with a non-interactive video network system.

# 1. During reexamination, EON treated the FCC IVDS specification as limiting in order to overcome the PTO's rejections of EON's claims.

In response to the PTO's rejection of '101 patent claim 10, EON argued that "it would be impossible for Morales-Garza '871 to operate on a carrier frequency of substantially 218 MHz, as it would require at least 6 MHz of bandwidth to operate." However, there is no *technical* reason why a system requiring 6 MHz of bandwidth to operate could not do so with a carrier frequency of substantially 218 MHz. The thrust of EON's argument to the PTO is that a system requiring 6 MHz of bandwidth to operate could not be *licensed* by the FCC to operate within the 218–219 MHz band allocated by the FCC IVDS specification. EON's argument therefore necessarily limits the EON invention to the mandates of the FCC IVDS specification. <sup>12</sup>

EON made the same argument to overcome the PTO's obviousness rejections of '101 patent claims 1–8 and 10–18 over the Martinez '177 and '036 patents in view of the Cunningham patent. To overcome these rejections, EON argued that "the FCC limitations on the IVDS frequency band prohibit the transmission of video, and both Martinez '036 and Martinez '177

prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention.").

<sup>&</sup>lt;sup>11</sup> '101 Office Action Resp. at 17 (Ex. P).

<sup>&#</sup>x27;1 '101 Office Action

<sup>&</sup>lt;sup>12</sup> Sensus in no way agrees with EON that a FCC IVDS-compatible system must *only* operate in the 218–219 MHz band. There is no reason why a FCC IVDS-compliant system could not be used in conjunction with a standard television broadcast system.

require the H-sync pulses [of a 6 MHz television channel band], at least for transmission of data from the television station to the radio net terminals." Once again, EON's patentability argument hinges on the FCC IVDS 1 MHz bandwidth being a technical limitation, rendering the IVDS and the related claim terms "interactive video network/data system" limiting.

2. During claim-construction, EON treated the FCC IVDS specification as limiting when it argued to the Court that its "invention is inoperable under [Sensus's] proposed construction" because it is technically impossible to transmit video in accordance with the FCC IVDS specification.

In its opening claim construction brief, EON argued that because a "licensed FCC IVDS service," which can only use a 1 MHz bandwidth, cannot technically transmit "full motion video," Sensus's proposed construction of "a network combining television broadcast and subscriber communications in which subscribers receive and respond to inquiries related to the television broadcast" would render "the [EON] invention [] inoperable." Once again, the only way to reach EON's conclusion—that Sensus's construction would render the EON invention inoperable—is if "the [EON] invention" is limited exclusively to the 1 MHz band allocated by the FCC IVDS specification. The mere fact that EON uses the FCC IVDS specification to contest Sensus's proposed construction, consistent with its arguments to the PTO during reexamination, indicates that the terms "interactive video network [system]" and "interactive video data system" limit the claims.

Furthermore, during the June 3, 2010 *Markman* hearing, in an attempt to overcome the arguments EON made to the PTO regarding there being no motivation to combine an interactive video network system with a non-interactive video network system, as discussed *supra*, EON argued to the Court that the claimed invention was not an interactive video network

<sup>&</sup>lt;sup>13</sup> *Id.* at 25.

<sup>&</sup>lt;sup>14</sup> EON's Opening Claim-Construction Br. at 3–4 (Dkt. No. 157). Based on the Court's provisional claim-construction order and EON's contention that "television" is too broad, Sensus revised its proposed construction to be "a network combining video broadcast and subscriber communications in which subscribers interact." *See* Sensus's Objections to the Court's Provisional Claim-Construction Order at 4–5 (Dkt. No. 331).

system—despite the express language in the patent specification to the contrary<sup>15</sup>—but rather an interactive video data service.<sup>16</sup> EON pointed to the following specification language in support of its position:

The Federal Communications Commission (FCC) has now established in the U.S.A. communication standards for such interactive video data service allocating wireless transmissions in the 218-219 MHz band for FCC licensing for public use in assigned local base station areas authorizing low power subscriber interaction units of maximum effective radiated power under twenty watts. There has been no known interactive video data service system available heretofore that has the capability . . . . <sup>17</sup>

Thus, EON has treated the FCC's IVDS standard as a limitation during claim construction.

3. During reexamination, EON treated "interactive video network" as limiting when it argued there would have been no motivation to combine prior art interactive video network systems with non-interactive video network systems.

In addition to relying on the distinction between an interactive video network and an FCC IVDS system to overcome prior art rejections, EON also relied on the distinction between an interactive video network system and a non-interactive video network system to overcome prior art rejections. EON's '101 and '546 patents both acknowledge that the prior art Morales-Garza patents describe the operation of the EON patents' claimed inventions. These Morales-Garza patents disclose and describe a two-way communication interactive video network. In particular, they teach that a subscriber can use an "RF-beep" signal to respond to an interactive inquiry related to a television program, where the presence or absence of a beep indicates whether the subscriber has responded affirmatively or not to a question related to the television programming.

<sup>&</sup>lt;sup>15</sup> '101 patent at 1:45–50; 5:12–13; 7:43–55; 10:65–11:3.

<sup>&</sup>lt;sup>16</sup> As of the date this briefing was due, the *Markman* hearing transcript was not available. Sensus can provide the citation once the transcript becomes available.

<sup>&</sup>lt;sup>17</sup> '101 patent at 1:28–37.

<sup>&</sup>lt;sup>18</sup> '101 patent at 1:45–50; 5:12–13; 7:43–55; 10:65–11:3.

<sup>&</sup>lt;sup>19</sup> See '906 patent at abstract and 1:7–3:33 (Ex. E); '267 patent at abstract and 1:7–2:60 (Ex. G).

<sup>&</sup>lt;sup>20</sup> See '906 patent at 2:8–57; 4:20–68 and Fig. 4; 8:50–9:13 (Ex. E); '267 patent at 2:8–60; 4:41–47 (Ex. G).

a. The PTO rejected EON's claims as obvious under § 103(a) based on the combination of the Morales-Garza and Martinez "interactive video network" systems with Cunningham's IMTS system

Consistent with this description of "the invention" by the specifications of the '101 and '546 patents, <sup>21</sup> including the references to the Morales-Garza prior art systems, in its first Office Action during reexamination, the PTO stated that the invention taught by these patents was an interactive video network system:

The claimed invention is directed a wireless, <u>two-way communication</u> <u>interactive video network</u> for providing digital communications, where low power subscriber units comprise transceivers that transmit low power digital messages back to local remote receivers associated with the base station repeater cells. *See*, *e.g.*, claim 1 and the technical field of the invention at col. 1. ll. 8-20.<sup>22</sup>

In response, EON never disputed the PTO's characterization of the invention.<sup>23</sup> Indeed, EON did just the opposite, embracing and relying on the interactive video aspect of the Morales-Garza patents to argue they could *not* be combined with Cunningham, which EON argued was an incompatible, non-interactive video, improved mobile telephone service (IMTS) system.<sup>24</sup>

In the first reexamination office actions, the PTO rejected all claims of the '101 and '546 patents by incorporating by reference a significant portion of the third party requestor's invalidity arguments as its own.<sup>25</sup> Specifically, the PTO rejected some claims as obvious under § 103(a), concluding that a person of ordinary skill in the art would have be motivated to

<sup>&</sup>lt;sup>21</sup> '101 patent at abstract; 1:8–10 and 22–44; 2:39–49; and 3:6–29.

<sup>&</sup>lt;sup>22</sup> '101 Office Action at 5 (Ex. N); '546 Office Action at 5 (Ex. O). *See also* Order Granting '101 Reexam Request at 4 (Ex. L) ("Thus, claim 19 is broadly directed to a video data system where portable ... subscriber units comprise a digital transducer that transmits digital data derived by the transducers.").

<sup>&</sup>lt;sup>23</sup> See generally '101 Office Action Resp. (Ex. P); '546 Office Action Resp. (Ex. Q).

<sup>&</sup>lt;sup>24</sup> IMTS was a pre-cellular VHF/UHF radio system that links to the public switched telephone network (PSTN), and was used as a radio telephone system to dial into the PTSN.

<sup>&</sup>lt;sup>25</sup> '101 Office Action at 5 (Ex. N) ("Accordingly, those <u>pages 34-45,48-61,65 and 66 of said Request</u> that address the above rejections, which include detailed explanations, are hereby incorporated by reference from the Request. In addition, <u>pages 3-5 and 26-32 of said Request are incorporated</u> by reference for its discussion of motivations to combine said applied references."); '546 Office Action at 6 (Ex. O) ("Accordingly, those <u>pages 34-53 and 71-73 of said Request</u> that address the above rejection, which includes detailed explanations, are hereby incorporated by reference from the Request. In addition, <u>pages 3-5 and 23-29 of said Request are incorporated</u> by reference for its discussion of motivations to combine said applied references.").

combine the interactive video systems taught by the Morales-Garza '906, '267, and '871 patents with the Cunningham '496 patent, which taught the use of repeaters to relay low-power radio signals to a base station, because all of these references were directed to the same field of endeavor—two-way radio communications:

Cunningham teaches a cellular telephone communication system in which a cell site is divided into a plurality of subdivided zones. Cunningham, col. 1 11. 9-15, FIG. 2. According to Cunningham, a subscriber unit receives a message from a cell site digital transmitter (Cunningham, col. 5 11. 36-42) and transmits a signal to a receive-only receiver positioned in the subdivided zone (Cunningham, col. 5 11. 11-25).

The '101 patentee admits that Morales-Garza '906 teaches the basic operation of a wireless interactive video system. '101 patent, col. 1 11. 22-27; col. 5, 11. 12-13. The '101 patentee further admits that Morales-Garza '871 teaches an exemplary technique to synchronize and multiplex transmissions in a wireless interactive video system. '101 patent, col. 7 11. 43-53. ... Given this objective, and because Morales-Garza '871, Morales-Garza '906, and Cunningham are directed to the same field of endeavor (i.e., two-way radio communications), a person of ordinary skill in the art would have considered the low-power wireless relay system of Cunningham in order to extend the wireless interactive video data capabilities of Morales-Garza '871 and Morales-Garza '906 to low-power portable subscriber units. See Cunningham, col. 5 11. 8-15. 26

Also, noting the similarity between Figure 2 of the '101 and '546 patents and Figure 3 of Cunningham, the PTO explained that a person of ordinary skill would be motivated to combine the "mobile telephone communication system" of Cunningham with the Morales-Garza and Martinez two-way interactive video communication systems:

<u>Cunningham is directed to a mobile communication system</u> and method employing frequency reuse within a geographical service area. Cunningham at the Title. Cunningham will be further described with reference to Fig. 2 of Cunningham shown below (which is substantially similar to Fig. 2 of the '101 patent, as illustrated below).

. . .

Importantly, a person of ordinary skill in the art would consider combining the mobile telephone communication system of Cunningham with the other two-way radio communication systems described herein in order to improve reception from subscriber units without increasing the power consumption of the subscriber units. See, e.g., Cunningham, col. 5 ll. 8-25. Indeed, the '101 patentee admits that mobile telephone communication systems are representative of "[p]rior art two-way radio transmission network technology." '101 patent, col. 1 l. 67 - col. 2

<sup>&</sup>lt;sup>26</sup> '101 Reexam Request at 35 (Ex. C).

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Thus, the PTO rejected EON's invention as obvious based on Cunningham in combination with Morales-Garza or Martinez, because they were all directed to the same field of two-way radio communications.

b. EON argued in response that the Morales-Garza and Martinez "interactive video network" systems could not be combined with Cunningham's IMTS system because these systems were incompatible

In response to the PTO's rejections, EON argued that its invention was not obvious because there was no motivation to combine the Morales-Garza interactive video network systems with the Cunningham IMTS system. In particular, EON argued that these two systems were incompatible because the interactive video nature of Morales-Garza could *not* be combined with the non-interactive video Cunningham system:

The Morales-Garza patents teach that the response time of the single r-f beep emitted by the response units 8 of Morales-Garza '906 (which appears to be the same for Morales-Garza '871 and '267) is essential for determining the identification of the response unit 8 that sends one of the r-f beeps. See, e.g., Morales-Garza '906 at col. 8, lines 52-60 ("A transmitter ask operation sends out queries so organized and synchronized on the video signal that it identifies each receiver answer unit and the distance between receiver and transmitter travel time of signals going and returning. Thus, the delay data, plus a local answer unit identification number permits a single r-f beep from any unit to be sent at the proper time so that when received it can be uniquely identified for processing answers to the queries.").

. . .

In contrast, Cunningham teaches a modified version of the IMTS radio telephone system, which uses PSTN signaling to establish a dedicated voice channel using a wireless medium. IMTS is not a cellular technology. . . . Instead, Cunningham uses the existing analog and non-cellular IMTS technology to perform any such subscriber location functions. Cunningham does not teach any form of digital communications or messaging.

. . .

In regards to the conclusory assertions by the Requester at pages 26-28 of the Request that Cunningham presents new information, absolutely no analysis of the prosecution history or prior art of record is provided by the Requester, and as discussed, those statements are both misleading and factually incorrect. The Requester also does not even mention that Cunningham only teaches the analog

<sup>&</sup>lt;sup>27</sup> '101 Reexam Request at 27–28 (Ex. C); '546 Reexam Request at 26–27 (Ex. D).

# IMTS system and fails to teach any digital processing. <sup>28</sup>

Indeed, EON went so far as to argue that because Cunningham was a telephone system technology using IMTS, it was incompatible with and "would destroy" the functionality of the Morales-Garza interactive video network system, because it would make it impossible for the interactive video network system to report the interactive responses (r-f beeps) by subscribers that were associated with the television program and video signal:

With this in mind, it is clear that adding remote receivers such as those taught in Cunningham to the system described in the Morales-Garza patents would destroy the functionality of the Morales-Garza patents, because the r-f beeps from each response unit 8 would be received at different times by the different remote receivers, making the delay data indecipherable.

. . .

The <u>suggested combination of the Morales-Garza patents and Cunningham is improper</u>, as many of the claim are not present in any combination of the references, and operating as recited in the rejected claims <u>would require a substantial reconstruction and redesign of the elements shown in the references, as well as a change in the basic principle under which the references were designed to operate. Further, how to modify the references is not even obvious using impermissible hindsight. *In re Ratti*, 270 F.2d 810, 813 (CCPA 1959).</u>

Thus, EON argued that there was no way to combine the Morales-Garza interactive video network system with Cunningham's non-interactive video network system. In doing so, EON relied on the fact that the Morales-Garza patents did not simply disclose a "two-way radio communication system" as the PTO had found, but instead specifically disclosed an *interactive video network system*, in the same manner that EON's own patents state that the '101 and '546 patents disclose and claim an interactive video system whose functionality and operation is described by the Morales-Garza prior art patents.

c. In the end, the PTO agreed with EON that there was no motivation to combine the Morales-Garza/Martinez interactive video network systems with the Cunningham IMTS mobile telephone relay system.

After considering EON's arguments, the PTO agreed that there was no motivation to combine the Morales-Garza/Martinez interactive video network systems with the Cunningham

<sup>&</sup>lt;sup>28</sup> '101 Office Action Resp. at 5–6, 8 (Ex. P); '546 Office Action Resp. at 5–6, 8 (Ex. Q).

<sup>&</sup>lt;sup>29</sup> '101 Office Action Resp. at 6–7 (Ex. P); '546 Office Action Resp. at 6-7 (Ex. Q).

mobile telephone relay system, finding that Cunningham was directed to an IMTS phone communication system that was incompatible with the interactive video network systems of Morales-Garza:

U.S. Patent No. 4,144,496 ("Cunninghman" [sic]) was the third teaching reference applied in said non-final Office action. Cunningham teaches subscriber units transmitting low power data. Col. 5,11.8-25. The Dinkins patent under reexamination and Cunningham provide motivations to add the transmission of low power data (see pages 7-11 of the non-final Office action). The low power data however is sent using a more complex, improved mobile telephone service ("IMTS") arrangement (col. 1,11. 16-27 and col. 4, 11. 14-20) and thus is more complex than the r-f beeps taught by the Morales-Garza '906 patent. Thus, the addition of low power data would have modified Morales-Garza '906 in a manner that Morales-Garza explicitly teaches is disadvantageous. Furthermore, Cunningham is directed to analog voice communications, and thus fails to contemplate sending data messages ... . Furthermore as discussed above, although Cunningham teaches subscriber units transmitting low power data and identity data, it would not have been obvious at the time the invention was made to add these teachings to the Morales-Garza patents. The subscriber units transmitting low power data and identity data, it would not have been obvious at the time the invention was made to add these teachings to the Morales-Garza patents.

EON thus convinced the PTO that there would be no motivation to combine Morales-Garza or Martinez with Cunningham because they were fundamentally different, incompatible types of systems. By agreeing with EON, the PTO abandoned its earlier argument that there would be a motivation to combine under § 103(a) because all of these prior art references were directed to the same broad field of two-way radio communications, instead finding that the nature of an interactive video network system versus an IMTS system foreclosed combining the prior art references. By distinguishing the Morales-Garza interactive video network—which expressly form the basis for EON's alleged invention in the '101 and '546 patents<sup>31</sup>—from non-interactive systems such as Cunningham's IMTS system, EON relied on the "interactive video network system" feature as a limitation to uphold the patentability of its claims.

From EON's arguments to the PTO during reexamination (as well as during claim construction itself regarding the 1MHz FCC IVDS bandwidth limitation) and the PTO's own finding of non-obviousness, the only possible conclusion is that the terms "interactive video"

<sup>&</sup>lt;sup>30</sup> Final Office Action for the '101 patent at 7–8 (Ex. R); Notice of Intent to Issue Ex Parte Reexamination Certificate for the '546 patent at 6–7 (Ex. S).

<sup>&</sup>lt;sup>31</sup> See '101 patent at 5:12–13; 7:43–53 (Ex. P).

network [system]" and "interactive video data system" characterize "the invention" of the '101 and '546 patent claims and are limitations. For this reason, as well as the other reasons Sensus has presented to the Court, these terms are a limitation; EON's claimed inventions cannot cover systems that are not interactive video network systems.<sup>32</sup>

## B. Peak power in the milliwatt range

To overcome a rejection of '101 patent claims 16–18, EON argued to the PTO that the Martinez '036 patent does **not** teach peak power in the milliwatt range.<sup>33</sup> Indeed, EON argued that the Martinez '036 "utterly fails to teach the claimed [subscriber transmitter units transmitting digital amplitude modulated pulses at a peak power in the milliwatt range] element." The Martinez '036 patent provides the following:

Using existing FCC rules as a criteria, the inventor has found that a subscriber transponder may use a pulse power of approximately 2 watts peak and average power of a few milliwatts to meet the FCC criteria and this is also sufficient to provide a useable signal to a T-NET radio central office at distance exceeding 20 miles <sup>34</sup>

The pulsed output of modulator 70 is further amplified in 72 to a <u>level of approximately 2 watts peak</u> and connected through duplexer 32 to antenna 12 where it is radiated. Transmitted pulses are approximately 5 microseconds wide and the duty cycle is very low; the resulting <u>average power of the transmitter is</u> about 1.5 milliwatts at 300 baud."<sup>35</sup>

Based on the Martinez '036 disclosure, EON submitted to the PTO the declaration of its expert, Dr. Jay Kesan, who opined that the milliwatt range was at least less than two watts, and certainly did not extend to 20W per the FCC IVDS regulations:

Martinez '036 does not teach subscriber transmitter units transmitting digital amplitude modulated pulses at a peak power in the milliwatt range. Martinez '036 teaches peak power in the 2 watt range, and average power in the 1.5 milliwatt

<sup>&</sup>lt;sup>32</sup> See Symantec Corp. v. Computer Assoc's Int'l, Inc., 522 F.3d 1279, 1288 (Fed. Cir. 2008) (quoting Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002)) ("Reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention."). See also Sensus's Objections to the Court's Provisional Claim-Construction Order at 1–5, EON Corp. IP Holdings, LLC v. Verizon Clinton Center Drive, No. 6:08-CV-385 (filed June 3, 2010) (Dkt. No. 331).

<sup>&</sup>lt;sup>33</sup> '101 Office Action Resp. at 19 (Ex. P).

<sup>&</sup>lt;sup>34</sup> *Id.* at 16:44–50.

<sup>&</sup>lt;sup>35</sup> *Id.* at 20:48–54.

range.36

Thus, based on Dr. Kesan's statements, power transmissions of 2 watts are in the "2 watt range," and 1.5 milliwatts are in the "1.5 milliwatt range." Consistent with these statements, as Sensus stated at the Markman hearing, any peak transmission power of one Watt or more would not be in the "milliwatt range." In its broadest sense, the "milliwatt range" would extend to just under one Watt, consistent with Dr. Kesan's expert opinion that EON submitted to the PTO to distinguish the Martinez '036 patent during reexamination.

## C. Low power; limited power

For the reasons stated in Sensus's prior briefing and at the Markman hearing, "low power" and "limited power" should be given the same construction as "milliwatt range." And EON's arguments to the PTO in reexamination that "milliwatt range" was less than 2W are similarly binding and limit the scope of "low power" and "limited power." If "low power" and "limited power" are not given the same construction as "milliwatt range," they are unbounded by the written description and therefore indefinite.<sup>37</sup>

#### D. Portable and Mobile

During reexamination, EON argued to the PTO that portability, as used in with the interactive video network system of the '101 and '546 patents, means that the subscriber units are able to communicate as they move through different geographic zones. And the PTO defined portable, based on '101 patent claim 19, as "moves through different geographic zones." In responding to the PTO's rejection of '101 patent claim 19, EON argued that "subscribers with portable subscriber units and facilities for communicating from the subscriber units when moved through different geographic zones" finds support in the '101 patent specification where it discusses the "handoff" of subscriber units as they communicate and move from one "stationary

<sup>&</sup>lt;sup>36</sup> Exhibit 1 to '101 Office Action Resp. at 3 (Ex. P).

<sup>&</sup>lt;sup>37</sup> E.g., Amgen, Inc. v. Chugai Pharm. Co., 927 F.2d 1200, 1217–18 (Fed. Cir. 1991); Modine Mfg. Co. v. United States Int'l Trade Commission, 75 F.3d 1545, 1557 (Fed. Cir. 1996). See also Seattle Box Co. v. Indus. Crating & Packaging, Inc., 731 F.2d 818, 826 (Fed. Cir. 1984).

<sup>&</sup>lt;sup>38</sup> See Order Granting '101 Reexam Request at 4 (Ex. L).

local remote receiver site 22 to another."<sup>39</sup> This "hand-off" allows the subscriber units to continue to communicate as they move through different geographic zones. Thus, portability means more than simply being "capable of movement" under any conceivable circumstance.

## E. Synchronously related

EON argued to the Court in the related *Verizon* case that "synchronously related" means "related in time and/or frequency," and the Court provisionally adopted EON's construction.<sup>40</sup> However, during reexamination, to overcome PTO rejections of several '546 patent claims, EON agreed with the PTO that the Martinez '177 patent disclosed *frequency* synchronization but argued that Martinez '177 still did not meet the "synchronously related" limitation in the rejected '546 patent claims. For example, EON said the following to overcome the PTO rejection of '546 claim 2:

[T]he data transmitted by Martinez '177 is digital but not multiplexed synchronously related data messages . . . Only the frequencies of Martinez '177 are synchronously related. 41

And, EON argued the following with respect to '546 claim 5:

[T]he radio net terminals of Martinez '177 **only transmit data that is synchronized in frequency**, not digital data signals of variable lengths synchronously related and timed for multiplexed message transmission, . . . . <sup>42</sup>

EON's arguments in reexamination confirm Sensus's proposed construction—that "synchronously related" refers to the synchronization of subscriber unit transmissions with the base station broadcast signal in both *time* and *frequency*. <sup>43</sup>

## F. Network hub switching center means

In reexamination, EON argued that the "traditional distributed PSTN switching system" of Cunningham fails to meet the "hub switching means" element of claim 11—consistent with

<sup>&</sup>lt;sup>39</sup> See '101 Office Action Resp. at 23–24 (Ex. P); '101 patent at 8:63–9:20.

<sup>&</sup>lt;sup>40</sup> See Court's provisional claim-construction order at 8, EON Corp. IP Holdings, LLC v. Verizon Clinton Center Drive, No. 6:08-CV-385 (E.D. Tex. filed May 17, 2010) (Dkt. No. 323).

<sup>&</sup>lt;sup>41</sup> '546 Office Action Resp. at 26 (Ex. Q).

<sup>42</sup> *Id.* at 27. *See also id.* at 34.

<sup>&</sup>lt;sup>43</sup> See Sensus's Objections to the Court's provisional claim-construction order at 7–8, EON Corp. IP Holdings, LLC v. Verizon Clinton Center Drive, No. 6:08-CV-385 (E.D. Tex. filed June 3, 2010) (Dkt. No. 331).

the extensive statements to this effect in the patent specification itself describing that use of a telephone switch would frustrate the invention and render it inoperable:

The Requester misrepresents Martinez '036 and Cunningham at pages 70-71 of the Request, as neither reference teaches hub switching means. It appears that the Requester is arguing that each of Martinez '036 and Cunningham independently teach this element, but the direct city-to-city communications of Martinez '036 relate to two different NCC network control centers in two different geographic areas, and there is nothing between those two NCC network control centers of Martinez '036, much less a hub switch. Cunningham teaches only the analog IMTS [improved mobile telephone] system that uses the **traditional distributed PSTN switching system**.

Thus, again, EON's argument to the PTO in reexamination contradicts its argument to the Court that a person of ordinary skill in the art would find that "hub switching means" and the related "network hub switching center means" are "well-understood structural element[s] in hierarchical networks" and would be telephone switches known in the prior art.

# G. Data processing means at the base station

In an attempt to overcome the presumption that 35 U.S.C. § 112 ¶ 6 governs the term "data processing means" in '101 patent claims 16–18, EON's reply brief cites to an allegedly off-the-shelf "X.25 packetizer" that is nowhere mentioned in the '101 or '546 patents as "well known in the art."<sup>45</sup> During reexamination, however, to overcome a rejection based on the Martinez '036 patent, EON argued that an X.25 packetizer would *not* suffice as a "data processing means," stating:

Martinez '036 teaches X.25 data transmissions, which would not provide multiplexed synchronously related digital data messages, as the specific X.25 packets being transmitted at any time would depend on the numerous variables related to that data transmission format, such as call set-up, clearing, data, interrupt, flow control, reset, restart, diagnostic and registration packets.<sup>46</sup>

Furthermore, EON also admitted to the PTO that "[t]he X.25 packets [used in the Martinez '036 system] can vary from 64 bytes to 4096 bytes, such that the smallest X.25 packet would be at

<sup>&</sup>lt;sup>44</sup> '546 Office Action Resp. at 31 (Ex. Q).

<sup>&</sup>lt;sup>45</sup> EON Reply Br. at 15 (citing an extrinsic source to illustrate that an X.25 "packet assembler/disassemble [sic] (PAD)" was a "well-known, off-the-shelf device at the time of the invention").

<sup>&</sup>lt;sup>46</sup> '101 Office Action Resp. at 26 (emphasis added) (Ex. P).

least 512 bits."<sup>47</sup> This minimum packet size of 512 bits is incompatible with the 240 bit packet size disclosed in the '101 and '546 patent specifications.<sup>48</sup>

Thus, the very "well-known, off-the-shelf device" such as the X.25 packetizer that EON has pointed to in its reply brief would not even work with the EON system as it would not provide the required "multiplexed synchronously related digital data messages" or the 240 bit packet size. These contradictions shown by EON's statements to the PTO demonstrate that "data processing means ..." is not "well-known structure" (and certainly not just any off-the-shelf structure as EON argues) and EON has failed to overcome the 112 ¶ 6 presumption.

<sup>&</sup>lt;sup>47</sup> *Id.* at 28–29.

<sup>&</sup>lt;sup>48</sup> See '101 patent at Figs. 4 & 5; 7:56–62 ("messages from the individual subscriber home units 4, (X) longer than 240 bits require several frames); 7:65–68 ("packet builders 41, 41A, etc. are individually assigned to a responding one of a simultaneously active subscribers until the subscriber's variable length message of n 240 bit frames is completed").

<sup>&</sup>lt;sup>49</sup> Plainly from EON's statements to the PTO in other contexts, such as the alleged inability to combine Cunningham with Morales-Garza or Martinez, these technical details and the incompatibility of the X.25 packetizer is not a mere technicality, but is very important to ensure that the invention disclosed and claimed by the EON patents actually functions and meets its stated objectives.

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Respectfully submitted,

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## **CERTIFICATE OF SERVICE**

I certify that this document was filed electronically pursuant to Local Rule CV-5(a) on June 21, 2010. Pursuant to Local Rule CV-5(a)(3)(A), this electronic filing acts to electronically serve all counsel who have consented to electronic service via the Court's CM/ECF system.

/s/ Hilda C. Galvan

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